

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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MCS JUN 07 2016

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WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Friday, May 06, 2016 10:36:50 AM

Page 1

Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 05.06.07 new issue EC
IPP Rev.B 05.02.08, Per ECN1080P

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN5C34A		Purchased	No			110	Each	116.0000	2	4			
AN5C34A									**				
Bolt													

DAS
6
9-89
DAS
28
9-89

DAS
27
9-89

Location	Loc Qty	Loc Code
FG	2	
18918	2	
over004	91	
m130033	19	
m131855	8	
m131856	8	
m132169	8	
m132381	8	
m132522	8	
m132674	8	
m133332	8	
m133921	8	
m134131	8	
ST286A	4	
m131177	4	
m132522	0	
ST336	19	
m131854	3	
m133917	8	
m133920	8	

3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Misabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process								
Misidentified ☐	☐ Past Due	OTHER : ☐							

Picklist Print

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Page 2

Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

D206-648-013

Manufactured No

110 Each

6.0000

1 2

DAS
6
9-89
DAS
28
9-89

D206-648-013

Ground Handling Wheel Modification

DAS
27
9-89

Location

Loc Qty

Loc Code

ST636

6

135552

2

136219

4

D2932-2

Manufactured No

110 Each

11.0000

1

DAS
6
9-89
DAS
28
9-89

D2932-2

Saddle RH Out, 206

DAS
27
9-89

Location

Loc Qty

Loc Code

ST396

11

132374

1

133376

2

142271

8

D2933-2

Manufactured No

110 Each

0.0000

1 2

DAS
6
9-89
DAS
28
9-89

D2933-2

Saddle RH In, 206

DAS
27
9-89

D2938-2

Manufactured No

110 Each

7.0000

1 2

DAS
6
9-89
DAS
28
9-89

D2938-2

Saddle RH Out, 206

DAS
27
9-89

Location

Loc Qty

Loc Code

ST395

7

143623

7

D2939-2

Manufactured No

110 Each

9.0000

1 2

DAS
6
9-89
DAS
28
9-89

D2939-2

Saddle RH In, 206

DAS
27
9-89

Location

Loc Qty

Loc Code

ST395

9

136107

1

141414

8

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Shop Packet Print

Page 2

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Description Work Order Deviation				Disposition					
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Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
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Past Expiry Date ☐	☐	Manufacturing Process	OTHER : _____							
Misidentified ☐	☐	Past Due								

Picklist Print

Friday, May 06, 2016 10:36:50 AM

Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

AN3C41A

Purchased

No

110

Each

338.0000

8

16

AN3C41A

Bolt

DAS
6
9-89
DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

10

122843

5

124975

1

m130081

4

ST338a

225

131651

75

m132169

75

m132522

75

ST347

103

m131367

28

m132381

75

16

D2652

Manufactured

No

110

Each

351.0000

16

32

D2652

Bushing

DAS
28
9-89

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

45

31985

45

ST009

306

141609

306

32

JUN 03 2016

DQA: _____ Date: _____



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<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left;">Root Cause</th> <th colspan="6" style="text-align: left;">FAULT CATEGORY</th> </tr> </thead> <tbody> <tr> <td>Environment ☐</td> <td>☐</td> <td>No Re-verification ☐</td> <td>Pressure/Forced ☐</td> <td>☐</td> <td>Temperature/Cure ☐</td> <td>☐</td> <td>Power Loss/Surge ☐</td> <td>☐</td> <td>Positioned Wrong ☐</td> </tr> <tr> <td>Design ☐</td> <td>☐</td> <td>Operator ☐</td> <td>Bending ☐</td> <td>☐</td> <td>Set-up ☐</td> <td>☐</td> <td>Folio/Program ☐</td> <td>☐</td> <td>Outside Dimensions ☐</td> </tr> <tr> <td>Doc/Data ☐</td> <td>☐</td> <td>Offset/Setup ☐</td> <td>Centre Not Concentric ☐</td> <td>☐</td> <td>BOM/Route ☐</td> <td>☐</td> <td>Grain ☐</td> <td>☐</td> <td>Over/Under tolerance ☐</td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>☐</td> <td>Supplier ☐</td> <td>Cracks ☐</td> <td>☐</td> <td>Broken/Damage/Defect ☐</td> <td>☐</td> <td>Weld ☐</td> <td>☐</td> <td>Part Incorrect ☐</td> </tr> <tr> <td>Handling/Pre ☐</td> <td>☐</td> <td>Training ☐</td> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>☐</td> <td>Wrong Stock Pulled ☐</td> <td>☐</td> <td>Part Lost/Missing ☐</td> </tr> <tr> <td>Material ☐</td> <td>☐</td> <td>Use for Testing ☐</td> <td>Cuffs ☐</td> <td>☐</td> <td>Contamination ☐</td> <td>☐</td> <td>Out of Sequence ☐</td> <td>☐</td> <td>Part Moved ☐</td> </tr> <tr> <td>Internal Transport ☐</td> <td>☐</td> <td>Poor Information ☐</td> <td>Crushing ☐</td> <td>☐</td> <td>Countersink ☐</td> <td>☐</td> <td>Off-set ☐</td> <td>☐</td> <td>Drawing ☐</td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>☐</td> <td>Rushing ☐</td> <td>Heat Treat ☐</td> <td>☐</td> <td>Cut Too Short ☐</td> <td>☐</td> <td>Mislabeled ☐</td> <td>☐</td> <td>Finish ☐</td> </tr> <tr> <td>LOA ☐</td> <td>☐</td> <td>Product Improvement ☐</td> <td>Wave/Twist in Tube ☐</td> <td>☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>☐</td> <td>Fit/Function ☐</td> <td>☐</td> <td>Misread ☐</td> </tr> <tr> <td>Substation ☐</td> <td>☐</td> <td>Process Improvement ☐</td> <td>Marks/Chatter ☐</td> <td>☐</td> <td>Drill Holes ☐</td> <td>☐</td> <td>Misaligned/off center ☐</td> <td>☐</td> <td>Turning Sequence ☐</td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>☐</td> <td>Manufacturing Process ☐</td> <td colspan="7" rowspan="2" style="text-align: center; vertical-align: top;">OTHER : _____</td> </tr> <tr> <td>Misidentified ☐</td> <td>☐</td> <td>Past Due ☐</td> </tr> </tbody> </table>										Root Cause				FAULT CATEGORY						Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐	Power Loss/Surge ☐	☐	Positioned Wrong ☐	Design ☐	☐	Operator ☐	Bending ☐	☐	Set-up ☐	☐	Folio/Program ☐	☐	Outside Dimensions ☐	Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐	Grain ☐	☐	Over/Under tolerance ☐	Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐	Weld ☐	☐	Part Incorrect ☐	Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐	Wrong Stock Pulled ☐	☐	Part Lost/Missing ☐	Material ☐	☐	Use for Testing ☐	Cuffs ☐	☐	Contamination ☐	☐	Out of Sequence ☐	☐	Part Moved ☐	Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	☐	Countersink ☐	☐	Off-set ☐	☐	Drawing ☐	Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	☐	Cut Too Short ☐	☐	Mislabeled ☐	☐	Finish ☐	LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐	Fit/Function ☐	☐	Misread ☐	Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐	Misaligned/off center ☐	☐	Turning Sequence ☐	Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____							Misidentified ☐	☐	Past Due ☐
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Picklist Print

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Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

MS21043-3

Purchased

No

110

Each

943.0000

20

40

MS21043-3

Nut

DAS

28

9-89

DAS

6

9-89

BAS

27

9-89

Location

Loc Qty

Loc Code

FG

80

103691

80

FP001

11

m130673

11

GA

385

m133990

385

ST302

361

m134502

361

ST304

106

m131340

106

40

D3672-7

Manufactured

No

110

Each

1,078.000

24

48

D3672-7

Washer, Phenolic

DAS

6

9-89

DAS

28

9-89

Location

Loc Qty

Loc Code

FG

40

129987

25

133986

15

ST049

38

137756

38

ST051A

1000

134786

500

142572

500

48

BAS

27

9-89

JUN 03 2016

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								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

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Page 5

Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

AN5C11A

Purchased

No

110

Each

108.0000

8

16

AN5C11A

Bolt

DAS
28
6
9-89

Location

Loc Qty

Loc Code

FG

4

103715

4

over003

100

M131305

50

M131624

50

ST338

4

M128739

4

DAS
27
9-89

16

AN5C12A

Purchased

No

110

Each

79.0000

4

8

AN5C12A

BOLT

DAS DAS
6 28
9-89 9-89

Location

Loc Qty

Loc Code

FG

2

18918

2

ST338

77

M129245

77

DAS
27
9-89

4

AN5C13A

Purchased

No

110

Each

83.0000

4

8

AN5C13A

BOLT

Location

Loc Qty

Loc Code

over003

75

M130466

75

ST338

8

M127363

8

DAS
27
9-89

4

DAS DAS
6 28
9-89 9-89
JUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER : _____							
Misidentified ☐	☐	Past Due								

Picklist Print

Friday, May 06, 2016 10:36:51 AM

Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

NAS1149C0532R

Purchased

No

110

Each

241.0000

8

16

DAS
6
9-89

DAS
28
9-89

NAS1149C0532R

WASHER

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

60

116513

60

ST266

181

m133031

177

m134181

4

1/6

AN4C6A

Purchased

No

110

Each

353.0000

12

24

AN4C6A

Bolt

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

14

103344

4

121657

10

OVER002

300

m134502

300

ST345

39

m133990

39

24

DAS
28
9-89

JUN 03 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

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Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

D3672-3

Manufactured No

110

Each

1,117.000

24

48

D3672-3

Washer, Phenolic

DAS
6
28
9-89

Location

Loc Qty

Loc Code

FG

100

133083

52

134449

48

FP001

213

132639

213

ST049

304

139583

304

ST051A

500

142571

500

NAS1149C0432R

Purchased

No

110

Each

1,857.000

24

48

NAS1149C0432R

WASHER

DAS
6
28
9-89

Location

Loc Qty

Loc Code

GA

428

m125807

428

ST266

1429

m134073

429

m134676

1000

JUN 03 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER :							
Misidentified ☐	☐	Past Due								

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Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

MS21043-4

Purchased

No

110

Each

889.0000

13

26

MS21043-4

Nut

DAS
6
9-89

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FG	40
104603	40
GA	95
m132803	95
OVER007	300
m134502	300
ST302	454
m133769	12
m134249	142
m134634	300

36

D3407-043

Manufactured

No

110

Each

10.0000

1

2

D3407-043

Tow Ring

DAS
6
9-89 DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

st530	10
136685	10

2

D3456-1

Manufactured

No

110

Each

110.0000

1

2

D3456-1

Washer

DAS
6
9-89 DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FG	7
25701	7
ST038	3
141125	3
ST038A	100
141989	50
144158	50

2

JUN 03 2016

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DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																																																								
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
																								OTHER : ☐																																							

Picklist Print

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Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

D3457-1 Manufactured No

110 Each 34.0000 2 4

D3457-1

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

FG 10
32409 10
ST037 8
127393 8
ST038 16
138904 16

DAS DAS
6 28
9-89 9-89

D2712 Manufactured No

110 Each 319.0000 10 20

D2712

Set Screw

DAS
27
9-89

Location

Loc Qty

Loc Code

FG 55
29962 55
ST009 64
135950 54
89929 10
ST012a 200
140532 100
141690 100

DAS DAS
6 28
9-89 9-89

D2934 Manufactured No

110 Each 42.0000 2 4

D2934

Saddle Spacer

DAS
27
9-89

Location

Loc Qty

Loc Code

FG 6
31929 6
ST014 36
136116 4
141428 32

JUN 03 2016
DAS
6
9-89
DAS
28
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

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Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

D2935

Manufactured No

110

Each

22.0000

2

4

D2935

Saddle Spacer

DAS
28
9-89

Location

Loc Qty

Loc Code

FG

6

31793

6

ST014

16

141082

16

110

Each

288.0000

9

18

AN3C36A

Purchased

No

AN3C36A

Bolt

Location

Loc Qty

Loc Code

FG

47

101261

4

122204

2

m131367

1

m132169

40

FP001

80

m131856

1

m132381

79

OVER002

135

m132522

55

m133916

80

ST347

26

131651

26

DAS
28
9-89

JUN 03 2016

DAS
27
9-89

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Friday, May 06, 2016 10:36:51 AM

Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

AN3C35A	Purchased	No	110	Each	59.0000	3	6	
AN3C35A								DAS 28 9.89
Bolt								

DAS
27
9.89

Location	Loc Qty	Loc Code
FG	4	
18914	4	
OVER002	20	
M132317	20	
ST347	35	
M128398	3	
M130851	1	
M133077	6	
M133694	25	

DAS
6
9.89

6

NAS1149C0332R	Purchased	No	110	Each	3,049.000	24	48	
NAS1149C0332R								DAS 28 9.89
WASHER								

DAS
27
9.89

Location	Loc Qty	Loc Code
FP001	1582	
m132262	4	
m132930	1004	
m134063	446	
m134073	128	
GA	225	
m133284	225	
ST266	1242	
m134474	142	
m134574	1000	
m134654	100	

DAS
6
9.89

JUN 03 2016

48

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		☐ OTHER : _____							

Picklist Print

Friday, May 06, 2016 10:36:51 AM

Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

D3672-1
D3672-1
Washer, Phenolic

Manufactured No

110 Each 634.0000 24 48

DAS
6
28
9-89

Location	Loc Qty	Loc Code
FG	10	
85222	10	
FP001	70	
112218	70	
ST049	54	
127322	54	
ST051A	500	
134785	500	

48

DAS
27
9-89

D3396-3
D3396-3
Bushings

Manufactured No

110 Each 24.0000 2 4

DAS
6
28
9-89

Location	Loc Qty	Loc Code
ST034	24	
109098	2	
123680	1	
132598	21	

4

DAS
27
9-89

AN5C35A
AN5C35A
Bolt

Purchased No

110 Each 65.0000 1 2

DAS
28
9-89

Location	Loc Qty	Loc Code
ST336	65	
M128894	1	
M129871	64	

12

DAS
27
9-89

JUN 03 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

Friday, May 06, 2016 10:36:51 AM

Page 13

Work Order ID: 145651

145651

Parent Item: K642-512

K642-512

Parent Item Name: Saddle

Start Date: 4/28/2016

Required Date: 5/5/2016

Start Qty: 2.00

Required Qty: 2.00

AN5C15A

Purchased

No

110

Each

23.0000

1

2

AN5C15A

Bolt

DAS
28
9.80

DAS
27
9-89

Location

Loc Qty

Loc Code

ST337

23

M130466

23

AN5C32A

Purchased

No

110

Each

135.0000

2

4

AN5C32A

BOLT

DAS
28
9.80

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

4

18918

4

over004

100

131650

100

ST336

31

m132102

31

MS21043-5

Purchased

No

110

Each

208.0000

4

8

MS21043-5

Nut

DAS
28
9.80

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

20

101418

20

GA

76

116548

76

ST302

112

m132382

12

m134502

100

JUN 03 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER :							
Misidentified ☐	☐	Past Due								

4.7 206L/L-1/L-3/L-4/407 HIGH GEAR FLOAT SKIDTUBES (TRI-BAG COMPATIBLE)

ITEM	QTY -511	QTY -512	QTY -515	QTY -516	QTY -541	QTY -557	QTY -549	QTY -551	QTY -013	PART NUMBER	DESCRIPTION
	X									D206-642-511	SKIDTUBE INSTALLATION, LH
		X								D206-642-512	SKIDTUBE INSTALLATION, RH
			X							D206-642-515	SKIDTUBE INSTALLATION, LH
				X						D206-642-516	SKIDTUBE INSTALLATION, RH
1	1	1			X					D206-642-541	SKIDTUBE
						X				D206-642-557	WEARSHOE KIT (REPLACES -547 KIT)
							X			D206-642-549	RUN-ON LANDING WEARPLATE KIT
			1	1				X		D206-642-551	SKIDTUBE
1	1	1	1	1					X	D206-648-013	GROUND HANDLING KIT
1					1					D3274-041	SKIDTUBE ASSEMBLY
1								1		D4362-041	SKIDTUBE ASSEMBLY
3					1			1		D2646	* AFT CAP ⁽¹⁾
4					2			2		AN3C4A	* BOLT ⁽¹⁾
5A					2			2		NAS1149C0332R	* WASHER ⁽¹⁾ (OR AN960C10L)
5B					2			2		D3672-1	* WASHER (REPLACES NAS1515H3L) ⁽¹⁾
6	1		1							D2932-1	SADDLE, FWD OUT, LH
6		1		1						D2932-2	SADDLE, FWD OUT, RH
7	1		1							D2933-1	SADDLE, FWD IN, LH
7		1		1						D2933-2	SADDLE, FWD IN, RH
8	1		1							D2938-1	SADDLE, AFT OUT, LH
8		1		1						D2938-2	SADDLE, AFT OUT, RH
9	1		1							D2939-1	SADDLE, AFT IN, LH
9		1		1						D2939-2	SADDLE, AFT IN, RH
10	8	8	8	8						AN3C41A	BOLT
11	16	16	16	16						D2652	BUSHING
12A	8	8	8	8						MS21043-3	NUT
12B	16	16	16	16						D3672-7	WASHER (REPLACES NAS1515H5)
13	4	4	4	4						AN5C11A (or AN5C12A)	* BOLT ⁽²⁾
14	4	4	4	4						AN5C11A (or AN5C13A)	* BOLT ⁽²⁾
15A	8	8	8	8						NAS1149C0532R	WASHER (OR AN960C516L)
15B	8	8	8	8						D3672-7	WASHER (REPLACES NAS1515H5L)
16	12	12	12	12						AN4C6A	BOLT
17A	24	24	24	24						D3672-3	WASHER (REPLACES NAS1515H4L)
17B	24	24	24	24						NAS1149C0432R	WASHER (OR AN960C416L)
18	12	12	12	12						MS21043-4	NUT
20A					9	9				D3537-1	* WEARPAD ⁽¹⁾ (REPLACES D2648-3)
21A					1	1				D3537-3	* WEARPAD ⁽¹⁾ (REPLACES D3429-1)
22A					1	1				D4956-15	* WEARSHOE ⁽¹⁾ (REPLACES D3535-15 + D3536-15)
23A					1	1				D4956-23	* WEARSHOE ⁽¹⁾ (REPLACES D3535-23 + D3536-23)
24A					1	1				D4956-39	* WEARSHOE ⁽¹⁾ (REPLACES D3535-39 + D3536-39)
25A					1	1				D4956-35	* WEARSHOE ⁽¹⁾ (REPLACES D3535-35 + D3536-35)
26A			8	8	78	78	8			AN3C4A	* BOLT ⁽¹⁾
26B			8	8	78	78	8			NAS1149C0332R	* WASHER ⁽¹⁾ (OR AN960C10L)
26C			8	8	78		8			ALS7-1032-130	* INSERT ⁽¹⁾ (or AKS4-1032-130, ALS4-1032-130, AELS-1032-130)
30	1	1	1	1						D3407-043	TOW RING
32A	1	1	1	1						D3456-1	WASHER
32B	2	2	2	2						D3457-1	WASHER
33	1	1	1	1						MS21043-4	NUT
34			1	1	1					AN4C5A	BOLT
35			1	1	1					NAS1149C0463R	WASHER (OR AN960C416)
36			1	1	1					D3413-1	RING
37	10	10	10	10						D2712	SET SCREW
38	2	2	2	2						D2934	SADDLE SPACER
39	2	2	2	2						D2935	SADDLE SPACER

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Revision: Q

Date: 13.08.12

REFERENCE ONLY

DART AEROSPACE USA, INC.

IIN-D206-642

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ITEM	QTY -511	QTY -512	QTY -515	QTY -516	QTY -541	QTY -557	QTY -549	QTY -551	QTY -013	PART NUMBER	DESCRIPTION
40									2	D3414-041	LUG ASSEMBLY (GHW)
41									4	AN3C37A	BOLT
42									8	D2652	BUSHING
43									4	MS21043-3	NUT
44									4	NAS1149C0363R	WASHER (OR AN960C10)
50	9	9	3	3						AN3C36A	BOLT
51	3	3	3	3						AN3C35A	BOLT
52	24	24	12	12						NAS1149C0332R	WASHER (OR AN960C10L)
53	24	24	12	12						D3672-1	WASHER (REPLACES NAS1515H3L)
54	12	12	6	6						MS21043-3	NUT
55	2	2	2	2						D3396-3	SPACER
56A	1	1	1	1						AN5C35A	BOLT
56B	1	1	1	1						AN5C15A	BOLT
60	2	2	2	2						AN5C32A	BOLT
61	2	2	2	2						AN5C34A	BOLT
62	4	4	4	4						MS21043-5	NUT
80								1	1	D4368-041	FWD WEARPLATE ASSY
81								1	1	D4368-043	AFT WEARPLATE ASSY
82A								1	1	D4383-1	WEARPAD
82B								1	1	D4383-3	WEARPAD
83								20	20	D3873-3	BUSHING
84									24	D3411-3	WASHER
85								2		D3275-1	SPACER
86A								6	6	AN3C40A	BOLT
86B								2	2	AN3C37A	BOLT
86C								2	2	AN3C36A	BOLT
87								10	10	MS21043-3	NUT

NOTES: (1) DENOTES THAT PART IS INCLUDED WITH D3274-041 OR D4362-041 ASSEMBLY ABOVE
(2) CHOICE OF BOLT WILL DEPEND ON CROSSTUBE (SEE INSTALLATION PROCEDURE)

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